

CLAIMS

1. A tracheostoma valve including a valve housing defining a valve cavity and having at least one rearward and at least one forward aperture such as to define an air flow passage through the said valve cavity between the rearward and forward apertures; and further comprising within the valve cavity a valve member deployable from a first collapsed configuration under vegetative breathing pressure wherein the said air flow passage is open to a second expanded configuration under speech pressure whereat the valve member acts to restrict flow through said air flow passage, wherein the valve member comprises a rear portion fixedly mounted to an inner surface of the valve housing rearward of the forward aperture so as to surroundingly and sealingly engage over the rearward aperture, a forward portion, and a collapsibly expandable sleeve portion provided therebetween to surroundingly define a part of the air flow passage, such that the forward portion is deployable from a position in the unexpanded configuration whereat the air flow passage is open to a position in the expanded configuration whereat the forward portion acts to restrict air flow through the air flow passage.
2. A tracheostoma valve in accordance with claim 1 wherein the sleeve portion is structured to facilitate expansion of the valve member in use.
3. A tracheostoma valve in accordance with claim 2 wherein the sleeve portion has a concertina structure.
4. A tracheostoma valve in accordance with any preceding claim wherein the sleeve portion is resiliently biased to the unexpanded configuration.

5. A tracheostoma valve in accordance with claim 4 wherein the sleeve portion is fabricated from flexible material and biased to the unexpanded configuration by provision of separate biasing means.
- 5 6. A tracheostoma valve in accordance with claim 4 or claim 5 wherein the sleeve is fabricated from inherently resiliently expandable material, such as elastomeric material, and is so configured that the inherent resilience biases the valve member to the unexpanded configuration.
- 10 7. A tracheostoma valve in accordance with any preceding claim wherein the forward portion incorporates a valve aperture and a valve seating surface is provided within the valve cavity on an inner surface of the valve housing such that when the valve member is in the expanded configuration the forward portion of the valve member seats against the valve seating surface in sealing manner to effect closure of the valve aperture therein and hence generally occlude the air flow passage.
- 15 8. A tracheostoma valve in accordance with claim 7 wherein the forward portion of the valve member comprises a partly apertured forward surface which forward surface is adapted to engage in fluid tight manner with the valve seating surface provided internally on the forward wall of the valve housing to effect closure of the air flow passage when the valve member is in the expanded configuration.
- 20 25 9. A tracheostoma valve in accordance with claim 8 wherein the aperture in the forward surface of the valve member is provided with a feathered edge.
- 30 10. A tracheostoma valve in accordance with any preceding claim wherein the valve housing comprises a forward wall, a rearward wall, and a

forwardly extending side wall portion therebetween and the forward aperture(s) are provided in the forwardly extending side wall portion of the valve housing.

- 5 11. A tracheostoma valve in accordance with claim 10 wherein a plurality of generally equally sized and shaped and generally equally spaced apertures are provided within the forwardly extending side wall portion of the valve housing.
- 10 12. A tracheostoma valve in accordance with any preceding claim wherein the valve housing is provided with an integral rearwardly extending cannular portion adapted to be retained within the stoma of a tracheotomy patient to provide a breathing passage in use from the trachea of the patient to the valve, or a rear face of the housing is adapted for releasable engagement with a forward surface of a cannular device already so adapted for provision within the stoma of a patient.
- 15 13. A tracheostoma valve in accordance with any preceding claim further comprising an additional aperture provided with a valve closure which is closed at both normal and speech breathing pressures, but which is caused to open under pressures higher than speech pressures.
- 20 14. A tracheostoma valve in accordance with claim 13, wherein the valve member comprises a sleeve portion with an apertured forward surface adapted to seat on a valve seating surface provided within the valve cavity on an inner surface of the valve housing in sealing manner; and wherein the valve housing comprises a forward wall, a rearward wall, and a forwardly extending side wall portion therebetween and the forward aperture(s) are provided in the forwardly extending side wall portion of the valve housing; and wherein this additional aperture is
- 25
- 30

provided in the forward wall of the valve housing in the vicinity of the valve seating surface and is sealed by a cough valve closure openable at excessively high pressure to provide an emergency through passage.

- 5 15. A tracheostoma valve in accordance with claim 14 wherein the cough valve closure is a mushroom valve of suitably resilient material releasably retained within the said aperture such as to be blown open at high pressure.
- 10 16. A tracheostoma valve in accordance with any preceding claim wherein means are provided within the valve housing to adjust the length thereof.
- 15 17. A tracheostoma valve in accordance with claim 15 wherein the valve housing is provided in at least two connected parts, one part including a rear wall and one part including a forward wall, together provided with a coupling which incorporates means to adjust the relative position of the two parts.
- 20 18. A tracheostoma valve substantially as hereinbefore described with reference to the accompanying drawings.